



SUPPORTING PARTICIPATION IN EARLY CHILDHOOD EDUCATION (SPIECE) OF CHILDREN FROM LOW SOCIO- ECONOMIC STATUS BACKGROUNDS – A 2018 – 2022 RESEARCH PROJECT

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EXECUTIVE SUMMARY

While government and non-government subsidies have increased the participation rates for children from low-income families, the cost of fees is not the only barrier to ECE participation for low socio-economic status (SES) families. The purpose of the *Supporting Participation in Early Childhood Education (SPIECE) of Children from Low Socio-Economic Status Backgrounds* 2018-2022 research project was to gather evidence on the impact of non-fee interventions on participation in ECE programs of preschool-aged children from low income family backgrounds. To achieve this, the research team designed a community-based Professional Learning and Support intervention program comprising diverse support strategies for Centre Directors, School Preschool Principals, teachers and educators working in ECE settings located in communities with higher-than-average rates of children with developmental vulnerability at the start of school and lower than average levels of socio-economic advantage, as measured by the 2018 Australian Early Development Census (www.aedc.gov.au). The aims of the Macquarie University Professional Learning and Support (PLaS) intervention program were to increase educators' knowledge about how best to support families' efforts to enrol and maintain their children's participation in ECE, and to initiate actions to provide the practical resources that would enable them to do so.

The Professional Learning and Support (PLaS) intervention comprised three components:

- (i) support visits and professional mentoring by members of the research team;
- (ii) a 4-module Professional Learning Program delivered on-site in each community;
- (iii) funding to resource centre/school or community initiatives to address locally identified barriers to ECE participation.

The PLaS was delivered by paired research team members assigned to each community. We used a quasi-experimental design with a wait-list control to implement and evaluate the intervention program in 19 ECE settings located in three low-SES communities in NSW. In 2019, nine ECE centres/schools participated in the PLaS program (the Intervention group), and ten centres/schools (the Control group) participated in 2021. (from the project was temporarily stopped in 2020-21 due to the COVID-19 pandemic).

We applied qualitative and quantitative methods to evaluate the PLaS intervention:

- (i) a comparison of enrolment/attendance patterns of 971 children aged 3- to 5-years in the Intervention and Control groups in 2019;
- (ii) a survey of 11 teachers and educators who participated in the 2019 intervention program; and
- (iii) end of project interviews with 13 Centre Directors/School Preschool Principals/Educational Leaders who participated in the 2019 or 2021 program.

Although the COVID-19 pandemic limited our ability to fully evaluate the PLaS program over the two waves of delivering the PLaS, the results provided strong evidence that the PLaS was:

1. responsive to the needs of families and their children in disadvantaged communities;
2. effective in promoting and improving the attendance of children;
3. attractive to and supportive of early childhood educators; and
4. financially cost-effective and sustainable.

The combination of the service support/mentoring visits, professional learning, and funding of practical/professional resources, was integral to the design and effectiveness of the PLAS intervention. The early establishment of trusting relationships with centre/school leaders and educators contributed to their continuing commitment to the project's aims. Consequently, the evaluation feedback reflects the successful implementation of inclusive, locally relevant strategies and initiatives with positive outcomes for families' engagement with, and children's enrolment and attendance in, ECE programs in the year before school.

DEFINITIONS OF TERMS

In our report, we adopted the following definitions of children's attendance, enrolment and participation in ECE from the Smith Family *Small Steps, Big Futures* Report (2021).

ATTENDANCE

A child who is enrolled and present for booked sessions at an early childhood education (ECE) service.

ENROLMENT

The initial intake into ECE and acceptance of a place by the family.

PARTICIPATION

A broadly used term that describes engagement by the child and family with preschool, covering both enrolment and attendance.

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LIST OF ACRONYMS

AEDC	Australian Early Development Census
CIF	Community Incentives Funding; \$15,000 funding per community provided as part of the PLaS to fund locally identified initiatives within individual centres/schools or in collaboration.
ECE	Early Childhood Education
SES	Socio-Economic Status
PLaS	Professional Learning and Support; the community-oriented intervention program comprising three components: Support Visits; PLP; and CIF
PLP	Professional Learning Program; a 4-module program delivered as a group to teachers (and other staff) in the participating ECE centres/schools within each community
SPiECE	Supporting Participation in Early Childhood Education

INTRODUCTION

The *Supporting Participation in Early Childhood Education (SPiECE) of Children from Low Socio-Economic Status Backgrounds 2018-2022* research project was designed in response to the NSW Department of Education's (2018) Request for Quotation and Statement of Requirements to "better understand and improve the participation of children from low SES backgrounds" and "build the evidence base and support future policy making on efficient and sustainable improvement" through gathering evidence on the measurable impact of non-fee intervention(s) on the participation rates (pp. 4-5). The aim of the research was to design, implement, and evaluate the impact and effectiveness of an innovative, community-based non-fee intervention for Centre Directors, school-based Preschool Assistant Principals, teachers, and educators working in centres and schools in areas of NSW that had higher than average rates of children with developmental vulnerability at the start of school and lower than average levels of community socio-economic advantage (www.aedc.gov.au).

Background

Ensuring that 100% of children receive 600 hours of early childhood education (ECE) in the year before school can be seen as one of a "growing number of policy problems where influencing human behaviour is very complex" (Australian Public Service Commission, 2018). Efforts to promote ECE enrolment and attendance through fee-based interventions through government and non-government subsidies for the cost of ECE have resulted in significant increases in the participation rates from 2014 to 2017 of children from non-English-speaking backgrounds, children with disability, and children from low-income families (Australian Government Productivity Commission, 2018). However, despite a steady increase, the proportion of Aboriginal and Torres Strait Islander children attending ECE programs in 2017 was lower than the proportion of all preschool-aged children in the community.

The cost of fees is not the only barrier to ECE participation for low socio-economic status (SES) families. As part of the preliminary work for the SPiECE project, we completed a detailed review of Australian and international literature relating to non-fee barriers experienced by low SES families' enrolment and attendance at ECE (Whiteman et al., 2018). The review identified five broad themes related to non-fee barriers for low SES families:

- parents' lack of awareness of the potential benefits of ECE for their children's learning and development
- difficulties with access, including: limited choices of ECE programs, transport, location of ECE centres/schools, time constraints; complexity of the system, fear of interaction with government agencies or being labelled
- financial costs (other than fees) related to attending ECE, including: provision of food, clothing, school bags, and excursions

- issues related to comfort, trust, cultural fit and unmet support, relevance of the program and parents' confidence in their children's abilities to cope with or benefit from preschool
- family beliefs and priorities, including beliefs in the importance of home-based care, not valuing daily attendance, and prioritising 'other' family matters over their child's attendance at ECE

Our review of literature also identified a range of non-fee interventions to encourage and increase ECE participation. In general, however, these publications reported on recommendations or suggestions for interventions. Very few papers were found that included an evaluation of the effectiveness of these interventions. We grouped these recommendations for ECE services and educators under five themes:

- building positive relationships with families and trust through staff stability, cultural competence, clear communication, and community connectedness
- engaging families in their children's learning through drawing families' attention to and sharing their child's achievements
- meeting child and family needs through practical help to address individual barriers, such as transport, more flexible opening hours, and access to allied health support and parenting education
- professional learning for ECE staff related to ways of working with low SES families that believes in, and builds on, families' capacity and empowers them
- professional support for ECE staff, ensuring time and other resources to enable them to implement interventions effectively

We concluded that non-participation in ECE by children from low SES families is complex, context specific, and often multi-dimensional. It was clear that a range of diverse solutions were necessary to address challenges experienced by individual children and their families by recognising and addressing the complexity of their specific circumstances.

Aims

The design of the Macquarie University-developed non-fee intervention acknowledged the need identified in the literature, to encourage and support early childhood leaders and educators to build positive relationships with families, better understand ways of working with families living in complex situations, be proactive in promoting regular attendance and engaging families in their children's learning and provide practical assistance to address specific family concerns. Our focus, therefore, was on strengthening ECE staff's capacity to engage with families from low SES backgrounds, through professional learning, mentoring, and practical assistance. Our approach was to deliver the intervention at the educators' workplace, to enable greater participation, build a genuine relationship with the university

research team and through this to provide active, ongoing support to ECE leaders and educators throughout the project to assist them identify and address the needs of families and children, especially those from low SES backgrounds. Through this research project, we sought to increase educators' knowledge about how best to support parents' efforts to enrol and maintain their children's participation in ECE and provide the practical resources that would enable them to do so.

Our aim was to design and deliver a **comprehensive non-fee intervention program** that was:

- responsive to the needs of low SES families and their children
- effective in promoting and improving attendance of children from low SES backgrounds
- attractive to and supportive of early childhood leaders and educators
- financially cost-effective and sustainable

In this report, we present the conceptual framework underpinning the design of a three-component non-fee intervention program that was contextually appropriate for Australian families from low SES backgrounds. We outline our use of a quasi-experimental design with a wait-list control group to implement and evaluate the intervention program in ECE settings located in three low-SES communities in NSW. We summarise the work done by participating ECE settings, in 2019 and 2020-21, to identify the barriers to ECE participation and the initiatives they proposed to alleviate or address these barriers.

We then present the methodology used to analyse and evaluate the impact of the intervention program by: (i) statistical comparison of enrolment and attendance patterns for Terms 1 through 4 of 3- to 5-year-old children in for the Intervention vs Control groups of ECE settings; (ii) a survey of teachers and educators who participated in the 2019 intervention program; and (iii) end of project interviews with Centre Directors/School Preschool Principals/Educational Leaders who participated in the 2019 or 2020-21 program.

We base our evaluation of the effectiveness and success of the intervention on the four criteria that underpinned the design (as outlined above). We conclude with the study limitations, and our overall conclusions and recommendations.

DESIGN OF AN INNOVATIVE, COMMUNITY-BASED NON-FEE INTERVENTION PROGRAM

Conceptual Framework

The design of the content and delivery of a comprehensive non-fee intervention was informed by behavioural economics ('nudge') theory that identifies three contexts that

influence human behaviour change: Individual, Social, and Material. Our design drew on contemporary models of practice for effecting behavioural change (Behavioural Insights Team 2016; Darnton & Thorne, 2013; Ly & Sloman, 2013; McNaughton et al., 2016; Southerton et al., 2011), combined with an informed understanding of the barriers and facilitators to low SES parents' participation in ECE. Below, we briefly explain the Individual, Social, and Material Model (Darnton & Thorne, 2013) and how it was applied to the design of the SPIECE intervention:

- **Individual** initiatives focus on influencing the attitudes of individuals as a means of changing their behaviours and choices. In relation to ECE enrolment and attendance, this refers to initiatives that increase families' motivation and knowledge about the importance of their child attending a preschool program before they start school and the need for their attendance to be regular.
- **Social** initiatives on supporting Centre Directors/managers and educators to be more aware of the social and cultural contexts of families and potential social barriers to family engagement and through this greater awareness, to change their practice and build more positive relationships with families.
- **Material** initiatives are designed to support parents to manage the practical challenges of regular attendance at ECE, such as transport, clothing and food, and other indirect costs. They also acknowledge and address administrative difficulties of accessing ECE.

The Macquarie University Non-Fee Intervention Program

Incorporating these three elements of individual, social and material elements, we designed an intervention program that was contextually appropriate for Australian families from low SES backgrounds. In accordance with international and national best practice in the design of community-oriented programs for addressing child and family disadvantage (Katz & Valentine, 2009), the implementation of the intervention was adapted to meet the specific needs of each community.

Described as the Macquarie University-developed Professional Learning and Support (PLaS) program, the community-oriented intervention comprised three components: (i) **Support Visits** and professional mentoring by members of the research team assigned to each centre/school; (ii) a 4-module **Professional Learning Program (PLP)** delivered to the group of teachers (and other staff) in the participating ECE centres/schools within each community; and (iii) **Community Incentives Funding (CIF)** for locally identified initiatives within individual centres/schools or in collaboration across the community. Each component is described next.

- i) **Support Visits.** Two members of the research team were allocated to each community to facilitate the project implementation through professional mentoring

that targeted the focus of this project on supporting children and families from low SES backgrounds. They arranged to visit the participating centres and schools in their target community at least three times during the project implementation. Throughout the implementation of the PLaS program, the same two research team members maintained close contact with their allocated centres/schools through the Centre Director/School Principal.

The first visit was important for establishing relationships by meeting face-to-face to explain the project objectives and design as well as identify staff who would participate in the PLP. During this initial visit, the researchers also explained the pre-task for Module 1 of the PLP with the aim of staff developing an understanding of their local community, families, and children by engaging in a situational analysis. The second visit was designed to support initial decision-making on the most relevant options for using the CIF. The research team members provided advice and examples to clarify their thinking and support the writing of the proposals for funding, and discuss costs and budgeting. The third visit provided further support for developing and actioning the CIF initiatives before the final PLP workshop when all the plans were shared. Where it was necessary or appropriate, a fourth support visit was made to a school/centre to fine-tune the proposal for CIF that was subsequently submitted to the full Research Team for consideration and approval.

- ii) **Professional Learning Program (PLP).** The PLP was delivered by the two research team members allocated to each community. The content of the PLP comprised of four modules, which were designed and developed through an in-depth review of literature and the professional expertise of the research team members. Each of the four modules was approved as Registered Professional Development at the Proficient Teacher Level by the NSW Education Standards Authority. In 2019, teachers who completed each module were then able to receive credit for five hours of Registered Professional Development (all four modules = 20 hours).

The goal of each module was to provide participants - the director or principal, teachers, educators and other staff from each centre/school, detailed information based on the literature review and support the attainment of skills to create, cost and then implement initiatives using the CIF. Importantly, the modules were designed to ensure a collaborative, collegial and strengths-based approach. Our approach was to provide high levels of autonomy over the decisions made regarding the CIF initiatives that participants developed, as we understood this was their community and they knew their families.

The sequence and content of the PLP began with a pre-task, which was a Situational Analysis – that aimed to focus participants’ attention on the factors in their community/setting that inhibited children’s’ enrolment/attendance. This was a key aspect of the PLP and consequent CIF initiatives. Spending time to delve into the specific, contextual barriers and strengths of the community, families, and children, ensured CIF initiatives were focused and relevant.

- a) **Module 1** provided participants with information from the literature review around barriers to enrolment and attendance, such as access issues, and effective intervention strategies. Centre teams were invited to report on their Situational Analysis, including their knowledge of community resources. The group reflected on their own identified barriers and strengths.
 - b) **Module 2** focused on working with families in complex situations and engaging with the community. Content included: risk and protective factors for different family types; social isolation and connectedness; building community capacity; an introduction to Trauma Informed Practice and collaborating with allied professionals and the idea of cultural brokers. The research team developed an intervention template that assisted educators to think through the ‘logic’ of their CIF initiatives by focusing their attention on the ‘problem’ and how they could address it.
 - c) **Module 3** focused on supporting educators to build children’s emotional well-being and self-regulation and guiding children’s behaviour. Information on supporting the well-being of educators working with families in complex situations was also provided. Through building the knowledge capacity of the educators, and group discussions that allowed for constructive feedback, questions and ideas, participants were then able to critically reflect on the initiatives they were developing.
 - d) **Module 4** was developed to enable participants to bring their draft CIF initiatives to share with the group and discuss prioritising ideas to fit within the budget available, and also, to think about moving forward with a common concern on transition to school issues. Content included possibilities for making the CIF initiatives sustainable, and how families and children could be supported as they transition into school settings.
- iii) **Community Incentives Funding (CIF)**. The inclusion of CIF at a cost of \$15,000 per community was a unique innovation of the Macquarie-developed PLaS program. It provided a practical resourcing opportunity for centres/schools to address the Material component of the Individual, Social, and Material Model, through activating the plan that each centre/school recommended as necessary to support children’s participation. Participants were supported through the PLP modules and the Support Visits to discuss and make decisions about ways to use the available funds to best support parents and remove critical barriers to children’s attendance and participation. Following the delivery of Module 3, each participating centre/school or community worked on developing a detailed description and costing for the proposed initiatives for the CIF, using the following guiding questions:
- what barriers to families’ participating have you identified? (i.e., what is the need?)

- what can be done to support families attend? (i.e., what is the intervention/initiative?)
- how will the intervention/initiative assist families by addressing the barrier? (i.e., what is the purpose?)
- what difference will it make to the child’s attendance? (i.e., what are the goals/anticipated outcomes?)
- how much will the intervention/initiative cost? (i.e., the budget – costing /frequency, services/resources to be purchased etc)
- timing (i.e., when will the intervention/initiative be actioned?)

The funding was allocated to each community, to be shared by each centre or school, and allowing for possibilities to collaborate on proposals that could benefit more than one centre/school in that community. Each of the proposed setting-specific initiatives, with costings, were reviewed by the research team for approval of funding. The suitability of each proposal was appraised in terms of its alignment with the project objective of supporting the participation of children from low SES backgrounds as well as the costings being cost-efficient and contained within the allocated budget. Subsequently, each centre/school implemented their approved initiatives and submitted claims for reimbursement or payment through Macquarie University.

IMPLEMENTATION AND EVALUATION OF THE PROFESSIONAL LEARNING AND SUPPORT (PLaS) INTERVENTION PROGRAM

In this section we outline our approach to implementing and evaluating the PLaS intervention program. Our research design was informed by best practice models, which have shown that “the effectiveness of a comprehensive package is generally significantly greater than the sum of its parts” (Australian Public Service Commission, 2018). As such, the unit of analysis for the evaluation of the PLaS was the ‘intervention program’ rather than any one of its three components.

Research Methodology

We applied a mix of qualitative and quantitative data collection methods within a quasi-experimental design to test the effectiveness and impact of the PLaS program as an intervention for teachers and educators working with preschool-aged children from low SES backgrounds. Qualitative methodologies, including open-ended survey questions and interviews, were used to evaluate the effectiveness and impact of the PLaS intervention in supporting individual educators in their work with children and families, and in promoting ECE participation by families and children in centres/schools. Quantitative methodologies

were used to assess the effectiveness of the PLaS in improving children’s enrolment and daily attendance patterns.

Quasi-experimental designs, like randomised controlled trials, are used to determine the effectiveness of an intervention by comparing outcomes for a treatment group versus a defined comparison group that reflects the outcomes if the intervention had not been implemented (Handley et al., 2018). Quasi-experimental designs seek to identify a comparison, or control, group that is as similar as possible to the treatment group. The impact of the intervention is determined by estimating the difference in the amount of change over time in the outcome between the treatment and control groups. Quasi-experimental designs can also compare before-and-after intervention cohorts within the same population. Comparison within the same population through the use of a wait-list control group has become an attractive model for education research, with benefits for all participating centres/schools and the researchers.

Identification of Low SES Communities

The first step in preparing for our quasi-experimental design was to identify a group of similar ECE settings within the target communities. In consultation with the NSW Department of Education, three low SES communities were confirmed: two in metropolitan Sydney, and one in regional NSW.

We used 2018 data from the Australian Early Development Census (AEDC) and the Australian Bureau of Statistics Socio-Economic Indexes for Areas (SEIFA) scores to identify specific areas/suburbs within each of these communities, informed by four criteria:

- lower than the NSW average SEIFA scores, which provides a community-level measure of socio-economic disadvantage;
- higher than the NSW average levels of developmental vulnerability in the first year of school, as measured by the proportion of children identified as being developmentally vulnerable in one or more of the five AEDC areas;
- access to ECE programs for 3- to 5-year-old children, including centre and school-based preschools and long day care centres;
- percentage of children who attended an ECE (preschool) program in the year before school.

We reviewed the 2018 AEDC data (released in March 2019) for each of the three identified communities using the AEDC Data Explorer search tool (www.aedc.gov.au/data) to identify local areas within each community with higher-than-average rates of childhood developmental vulnerability. The 2018 AEDC reported an average rate for NSW of 19.9% of children being developmentally vulnerable. We set a cut-off of 30% of children being developmentally vulnerable as the eligibility criterion:

- Metropolitan Community 1 AEDC data was based on teacher reports for 5,780 children and 39 local areas, with an overall average of 23.2% of children being developmentally vulnerable. Our review of the data for each of these 39 areas identified 10 areas with percentages $\geq 30\%$.
- Metropolitan Community 2 AEDC data was based on teacher reports for 2,546 children and 26 local areas, with an overall average of 25.4% of children being developmentally vulnerable. We identified 6 areas with percentages $\geq 30\%$.
- Regional Community comprised 12 separate communities, distributed over a large area of NSW. We selected the three communities with the largest populations: A (546 children, 16 areas, 23.0% developmentally vulnerable), B (216 children, 11 areas, 23.2% developmentally vulnerable), C (596 children, 8 areas, 18.6% developmentally vulnerable). We reviewed the figures for all 35 areas in the region and identified 5 areas with percentages $\geq 30\%$.

AEDC data for these 21 local areas provided the percentages of children who were found to be developmentally vulnerable for each of the five AEDC domains, and for one or more domains, the percentage of children who attended a preschool program in the year before school, and the SEIFA score as a measure of socio-economic disadvantage for each area.

The second step that was required for our quasi-experimental design was to create paired groupings within the potential recruitment sample for allocation to the treatment and control conditions. We achieved this by using the AEDC maps, to identify geographical separation of the selected areas.

We then examined the AEDC maps for each of these areas to identify all centre and school-based preschools and long day care centres. This process identified 16 preschools/long day care centres offering ECE programs in the Metropolitan 1 areas, 15 in Metropolitan 2, and 12 in the Regional areas, generating a potential sample of 43 centres/preschools for the non-fee intervention program.

Recruitment of ECE Centres/Schools

Following ethical approval from the Macquarie University Human Ethics in Research Committee, we sourced contact details that are available on the Australian Children's Education and Care Quality Authority (ACECQA) National Register of ECE programs (www.acecqa.gov.au/resources/national-registers) to invite all 43 eligible ECE settings to submit an Expression of Interest (EOI) to participate in the research. Three EOIs were developed: for centres, school-based preschools, and managing organisations. An initial telephone contact was made by a member of the research team, with an email follow-up attaching the relevant EOI document. For the centres/schools that were managed by a large organisation (e.g., KU Children's Services, SDN Children's Services, Goodstart Early Learning, G8, City Councils, NSW Department of Education), we also sought additional approvals.

Centres/schools were asked to submit their EOIs via an online Qualtrix link. Reminder emails were sent if needed, and phone calls were made by members of the research team to explain the project and encourage submission of an EOI. Response rates of 53-54% were achieved in Metropolitan Community 1 (8 of the possible 15) and the Regional Community (7 of 13), but only 33% in Metropolitan Community 2 (6 of 15). The total number of EOIs received was 21.

All centres/schools that submitted an EOI were invited to participate in the research project, and Directors/School Principals were sent an information and consent form to sign. The 20 centres/schools that accepted the invitation to participate in the research were allocated to an intervention and a control group.

The 20 participating long day care centres, preschools and school-based preschools comprised a mix of provider organisations, including ECE programs managed by state or local council governments (n =10), not-for-profit organisations (n = 5), and for-profit organisations (n = 5).

DELIVERY AND OUTCOMES OF THE PROFESSIONAL LEARNING AND SUPPORT (PLaS) INTERVENTION PROGRAM

The recruitment phase of the research was completed in June 2019, and the PLaS intervention program commenced in Term 3, with 10 centres/schools across three low SES communities participating (Intervention group). Of these, 9 centres/schools completed the PLaS (one Regional centre withdrew after Module 1).

Delivery of the PLaS to the 10 Control centres was planned for 2020. It commenced early in 2020, with the delivery of Module 1 in Term 1, but had to be paused due to the impact of the COVID-19 pandemic on ECE centres/schools. The delivery of the PLaS program recommenced in 2021. One long day care centres withdrew due to changes in staff and was replaced by another centre operated by the same provider organisation in the same area.

In 2019, a total of 27 Centre Directors, School Preschool Principals/Assistant Principals, teachers, and educators participated in the PLaS intervention program. In 2020-21, 20 Centre Directors and educators participated.

In the following sections we summarise the research team's approach in delivering the PLaS program. For educators, this process began with the completion of a Situational Analysis (pre-task) for each centre/school and progressed throughout the delivery of the 4-module Professional Learning Program and the Support Visits. This process and the outcomes for each centre/school and community were summarised in a template that identified: the barriers to ECE participation; what could be done to support participation through site-specific interventions; how these initiatives would assist families and make a difference to children's attendance; and what the intervention would cost.

Approach

The notion of collaboration or partnership was intentionally built into the project design and unfolded as we progressed the intervention. From the beginning, the team recognised the importance of establishing collaborative relationships with the educators. Initial conversations via phone were followed up by personal visits to each ECE setting to discuss the PLaS and expectations that the teachers and educators had about participating in the research.

When the participants in each community came together during the PLP module delivery sessions, we were able to establish a shared understanding of trust and mutual respect, which led to open, honest, and rich conversations. These PLP sessions were held after work hours and hosted by each participating centre/school in turn. The inclusion of a shared meal during these sessions, funded by the project budget, enhanced these relationships between the research team and the participants. Interactions during these sessions extended into less formal conversations and enabled the establishment of connections among centre/school staff within each community as well as with the research team. Continuing communication through follow-up emails and phone calls also contributed to consolidating relationships with mutual respect and regard for one another and encouraged regular attendance at the PLP sessions by participants who appeared genuinely interested in learning and actively engaged in the sessions.

It is important to note that the schedule of support visits, as planned initially, had to be adjusted during the height of COVID restrictions impacting the centres/schools in NSW. Respectful of these uncertainties and challenges faced by families and early childhood staff, the research team accommodated the needs of the participating centres/schools. For instance, in some communities, it was necessary to deliver the final Module via zoom due to COVID and in other communities, attendance dropped as staff were on leave or reluctant to attend face-to-face sessions. These experiences underlined the importance of establishing rapport and building trusting relationships between the research team and the practitioners early, and through face-to-face sessions. In addition, we sent a letter of appreciation and understanding to each centre/school to acknowledge the valuable work they were doing as front-line services supporting children and families in their communities.

Barriers to Participation in ECE

An important aspect of the delivery of the intervention program was to acknowledge participants' knowledge of their community, families, and children, and to provide a high level of professional autonomy in developing initiatives to address specific barriers to enrolment and/or attendance. Participants worked together identified specific barriers that affected ECE participation in their centre/school and local community. Some of these local barriers reflected what had been evident in the literature review, including:

- a lack of trust in formal educational services held by some families in their communities,
- a lack of community understanding about the importance of attending a preschool program,
- children who required additional supports and interventions from allied health or other professionals – such as speech language therapists, occupational therapists, and psychologists,
- families who reported a lack of access to information, intervention, resources, and therapy, long waiting lists, cost, and location challenges,
- difficulties for families in complex circumstances to access ECE due to transport issues/cost when children also have a disability,
- non-fee costs associated with enrolment, for example, lack of appropriate or specific clothing or materials,
- children and families who were already enrolled but struggling to attend regularly, and
- families who enrolled their children, attended for a little while and then left.

Initiatives to Address Barriers to Participation in ECE

The local interventions that were proposed by the participants were creative, many and varied. The rationale behind these initiatives fell into four overall themes:

1. developing trust and a sense of belonging between families and the ECE setting;
2. addressing non-fee costs associated with enrolment in ECE;
3. supporting families experiencing challenges related to having children with disabilities and/or impacted by trauma; and
4. increasing families' understanding of the value of ECE. Other initiatives were site-specific.

Each of these themes are described more fully in the following sections.

Developing Trust and a Sense of Belonging Between Families and the ECE Setting

Several centres/schools developed initiatives to address families' lack of trust in formal educational services, by finding other ways to make initial contact to enrol children. Initiatives included participants in one community setting up an information stall at local shopping centre with a display about the setting and educators available to have informal

chats with families and answer any questions families had in this neutral setting. Another initiative to increase trust and build partnerships with families was the creation of a comfortable, separate space where educators and families could sit together and complete forms and documentation together.

Addressing Non-Fee Costs Associated with Enrolment

Some centres/schools focused on the practical barriers to enrolment and attendance and used the CIF to purchase appropriate required clothing (e.g., t-shirts for children wearing singlets), drink bottles, insulated lunch boxes, or hats. Providing these resources for all children on enrolment took pressure off families and reduced feelings or experiences of stigmatisation. In one setting funds were used to purchase these items and offer them on enrolment. In another, a preschool logo was designed for the preschool t-shirts to create a sense of belonging to the preschool.

Supporting Families Experiencing Challenges Related to Having Children with Disabilities and/or Impacted by Trauma

Many centres/schools developed interventions that brought specialists into their setting to support children and/or work with educators to support children and families with disabilities and/or impacted by trauma. For example, one centre developed an initiative to provide a speech therapist in-residence to enable families to build rapport with the therapist, enabling further investigation to occur. Another centre provided training on strategies for working with children who are experiencing trauma for both staff and families. Another centre worked closely with a local school to transition a child and support his emotion regulation needs. This involved releasing one educator to attend the child's kindergarten class for one hour each week with the child, to support their transition and foster collaborative partnerships between the family and school. Many of these initiatives including using CIF for 'backfill' enabled the participants to observe and work with the allied health professionals 'in-situ' and have time to engage in professional conversations and exchanges about strategies to support children in group ECE contexts.

Increasing the Awareness of the Value of ECE for Families

Participants identified various reasons for irregular or unstable attendance rates, but all centres/schools wanted to increase family awareness of the value of ECE as a means of encouraging more regular attendance. One community-level initiative was to develop a flyer on the importance of early childhood education and to distribute this through a wide range of community services and businesses. In another community, one of the centres organised a professional development evening on children's brain development for both educators and families. It was a time for mutual learning and developing partnerships. Importantly, this occurred in the early evening and children were provided with dinner and play in one classroom, whilst educators and families enjoyed a light supper together.

Other Site-Specific Initiatives

In one centre, difficulties with attendance were addressed by creating a shorter day (6 hours) which allowed an increase in the days enrolled with no increase in fees. This resulted in a more regular pattern of attendance for children.

DATA COLLECTION AND ANALYSIS

Ethical Considerations

The ethical aspects of the research design and the collection of children's daily attendance records, with parent assent, were approved by the Macquarie University Human Research Ethics Committee (Reference No: 5201949777427) in May 2019. Two amendments were submitted and approved. The first, in November 2019, replaced the focus group discussions which were included to gather educators and Centre Directors/School Principals' perceptions about the effectiveness of the PLaS intervention program, with an online survey. This change was made in response to the challenges associated with gathering participants together for a focus group. The survey allowed individuals to respond at a time that was convenient to them and ensured that they felt able to contribute their ideas openly and honestly.

The second amendment was submitted and approved in September 2021 to replace focus group discussions with educators and parents with an interview with the Centre Directors/School Principal (or nominated educational leader). Focus groups were no longer feasible due to the significant disruption of the project experienced during two COVID lockdowns. This interview was designed to cover the centre/school's experience of the PLaS intervention program, the changes that had been made through the use of the CIF, and the impact on the centre/school, families and children. Interviews were conducted by a research assistant who had not been involved in the delivery of the PLaS program.

Attendance Records

Data Collection

In NSW, all ECE centres/school-based preschools are required to record daily attendance of children and to retain these records. Long day care centres that receive Commonwealth government subsidies for fees are required to submit these records to the government on a fortnightly basis. All the participating long day care centres used one of a number of management software systems (e.g., Explore, Harmony, Hubworks, Kidsoft, Qikkids) to collect and store attendance records. Preschools have different requirements and were less likely than long day care centres to have made the switch to an electronic sign-in system. Three of the participating preschools used hard copy paper sheets for recording children's

sign-in and sign-out times. Also, when software programs were temporarily down, centres reverted to using hard copy sign-in sheets.

Attendance records were requested to be provided for each school Term. Ensuring the collection and transfer for analysis of a complete record of attendance for each child proved to be a major challenge. Some centres/schools had difficulties accessing or downloading their records from the software program and required advice and direct support from a member of the research team to navigate the system. Hard copy records were provided as PDF copies and required manual entry by our research assistant. A further complication was that different software programs produced individual child records in different formats: e.g., week by week or for the whole term; organised by each individual child or by class group. These differences in the format of the records that were received added further challenges to the transfer of data for analysis.

A summary of the centres/schools that provided attendance records is set out in Table 1. In 2019, records were provided for 22 ECE classrooms and a total of 971 children, of whom 376 were from the Regional Community, 338 from Metropolitan Community 2, and 257 from Metropolitan Community 1. Across the 19 ECE settings, the numbers of children attending varied by centre/school size (from 13 to 80 places per day) and type (preschool and long day care). For example, some preschools provided a 5-day/fortnight program for two groups of children. Due to the nature of the study design, it was not possible to ensure an equivalent number of children in the Intervention and Control groups; however, both groups included a substantial number of daily attendance records.

Table 1. Attendance Records for Participating Early Childhood Settings in 2019

Community ECE Code	Number of classrooms participating	Maximum number of 3-5s children Enrolled/Day	Number of Children with Attendance Records	Number of Complete Records	
				Intervention	Control
Regional					
231	1 room of 3-5s	40	90	90	
232	2 rooms of 3-5s	48	126	126	
133	1 room of 3-5s	25	40		40
134	1 room of 3-5s	20	37		37
135	1 room of 4-5s	33	61		61
136	1 room of 4-5s	16	22		22
Metropolitan 2					
221	1 room of 3-5s	20	61	61	
222	2 rooms of 3-5s	80	49	49	
223	1 room of 3-5s	13	36	36	
224	2 rooms of 4-5s	20/20	66	66	
125	25 places	25	50		50
126	1 room of 3-5s	19	53		53
127	Mixed age group	27	23		23

Metropolitan 1					
211	1 room of 3-5s	20	60	60	
212	1 room of 3-5s	20	38	38	
213	1 room of 3-5s	29	52	52	
114	1 room 2-5s	30	29		29
115	1 room of 3-5s	28	46		46
116	1 room of 3-5s	20	32		32
Total sample	22 rooms		971	578	393

Data Preparation

Once the attendance records were received, they were de-identified and transferred from their original format to a project-designed excel file with a pre-set calendar with a 24-hour clock, and pre-set formulae for calculating daily and weekly hours. To ensure confidentiality of the data, each centre/school was allocated a numeric code, and each child who was enrolled was allocated a unique code based on the centre code and the number of enrolled children. For example, for centre 113, the child codes were 13301, 13302, 13303, etc.

Each child's attendance records were entered manually or pasted into the study excel file in 'long format', i.e., one row per child per day. Arrival and departure times were entered for each day attended and total hours for the day and the week were calculated automatically. If a child was absent on an enrolled day, this was entered manually.

Attendance records were checked for errors and missing data and, where needed, the centre/school was contacted and requested to provide these additional data. In cases where the arrival or departure time was missing, we inserted times based on the child's arrival or departure time for the next attended day. All children were retained in the data file, including those who only attended the centre/school for a short period of time.

Data Analysis – Descriptive Statistics

Simple computations were applied to the raw data records to generate summary scores for each child's enrolment and attendance for Terms 1, 2, 3, and 4. Enrolment was based on the child's recorded enrolled days. Attendance was based on two indicators. First, we calculated the percentage of days attended for each term by dividing the number of days attended by the total number of enrolled days (not including public holidays). Second, we used the exact times that the child arrived and departed each day and summed these for each day attended to calculate the number of hours attended for each term.

The data set for analysis was then created in a sequence of steps. First, we generated overall summary scores for the number of enrolled days, the percentage of days attended, and the number of hours attended for Terms 1, 2, 3, and 4 for each centre/school by merging

children's data. Second, we combined centre/school summary scores by community and by Intervention/Control to organise the data into six groups: Metropolitan Community 1 Intervention and Control; Metropolitan Community 2 Intervention and Control; Regional Community Intervention and Control settings.

We used descriptive analyses (Mean, Standard Deviations, N – number of cases) and graphs to explore the pattern of change in the number of enrolled days, the percentage of days attended and the number of hours attended over the four school terms for the Intervention and Control groups in each community and for the total sample.

Data Analysis – Predictive Statistics

Repeated measures regression analysis was used to examine the effects of the PLAS intervention on the children's attendance across Term 1 through Term 4. *Intervention versus Control* was the predictor variable of interest, but these analyses also took account of the differing contexts of the study design. *Community* (Regional, Metropolitan 1 and 2) and *Type of ECE* (long day care, preschool) were included as co-variates because they were not equally represented in control and intervention groups. The outcome variables (*Enrolment*, *Percent Attendance* and *Total Hours Attended*) were represented by four measures (*Term 1*, *Term 2*, *Term 3*, *Term 4*) and tested in a set of contrasts with *Term 2* as the reference category. These analyses were designed to examine whether changes in children's enrolment and attendance from Term 2 to Term 3 and Term 4 could be attributed to the PLAS Intervention, over and above the effects of the type of ECE setting they attended or the community.

Teacher/Educator Survey

In 2019, following the completion of the 4-module PLP, Centre Directors, School Preschool Principals, teachers, and educators in the Intervention group were sent individual emailed invitations to complete a feedback survey via an online link.

The survey used rated scales and open-ended questions to gather feedback on the Professional Learning Program (PLP) and the Community Incentives Funding (CIF) components of the Professional Learning and Support (PLaS) intervention program. Questions focused on the relevance and usefulness of the PLP content, tasks, and activities to their work with children and families and in helping participants decide on setting-specific initiatives. Participants were also asked about the extent to which their knowledge of the issues that impact attendance of low SES families had changed as a result of the PLP.

A 5-point rating scale was used, where 1 – not at all, 2 = slight/slightly; 3 = moderate; 4 = quite; 5 = extreme/extremely.

Data Analysis

Questions that provided a rating were averaged across the group for each of the questions. Questions that asked for written comments were analysed thematically using qualitative methods.

Interviews with Centre Directors/School Principals/Educational Leaders

Centre Directors and School Preschool Principals of centres/schools that participated in the 2019 and the 2020-21 PLaS non-fee intervention program were invited via email to participate in an interview about the project (either themselves or to nominate the Educational Leader). The research assistant who was engaged to conduct the interviews explained the purpose of the interview and with participants' agreement, arranged a mutually convenient time to conduct the interview via video link.

The aim of the interview was to seek Directors/Principals/Educational Leaders' views on the approach that was used in the research project, and any suggestions they or their teachers/educators had for improving the approach or content. The interview was designed to cover the centre/school's experience of the PLP and the changes that they made to their setting or practices through the use of the CIF package. The interview questions asked about their experiences of three components of the project:

1. the series of four PLP workshops delivered by the research team in their community
2. the centre/school's development of a locally-based interventions tailored to their own setting – with support from members of our research team
3. the use of the CIF package to realise these interventions

Interviews lasted approximately 45 minutes each and were audio recorded and later transcribed by the research assistant.

Analysis of Transcripts

Transcripts were analysed using an inductive thematic approach. First, members of the research team independently coded a subset of the interviews. Codes were then collated into a codebook which was then applied to all interviews by a second, independent research assistant with no previous involvement in this study. The research assistant coded the interviews three times, refining the codes in the process. From these codes six themes were identified and are discussed below.

RESULTS/EVALUATION OF THE PROFESSIONAL LEARNING AND SUPPORT (PLaS) INTERVENTION

Children’s Enrolment and Attendance Data

A complete set of daily enrolment/attendance records for all enrolled 3- to 5-year-old children in 9 Intervention and 10 Control centres/schools were collected in 2019. As noted above, these records included all children who attended the centre/school in 2019, including those who were enrolled for a short period of time. It is important to note that these results are for the first delivery of the PLaS intervention, and that Term 1 and Term 2 are baseline data. The PLaS commenced in Term 3 and was completed in Term 4, 2019.

The second delivery of the PLaS, in 2020 and 2021, was affected by the COVID-19 pandemic that caused major disruptions to attendance patterns. Collection of attendance records was ceased.

In the following sections, we address research questions about the impact of the PLaS intervention on children’s enrolment and attendance. We compare the number of enrolled days, the percentage of enrolled days attended, and the total number of hours attended by children in the Intervention group of ECE centres/schools with children in the Control group of centres/schools. We examine the pattern of change across Terms 1, 2, 3, and 4 graphically in Figures 1, 2, and 3. Results are presented for Intervention and Control groups in each of the three communities, and the combined communities. We then present the results of from a sequence of statistical comparisons, using repeated measures regression analyses, to examine the predictive effects of the PLAS intervention on enrolment and attendance, controlling for community and type of ECE as covariates.

Patterns of Change in Enrolment of 3- to 5-Year-Old Children

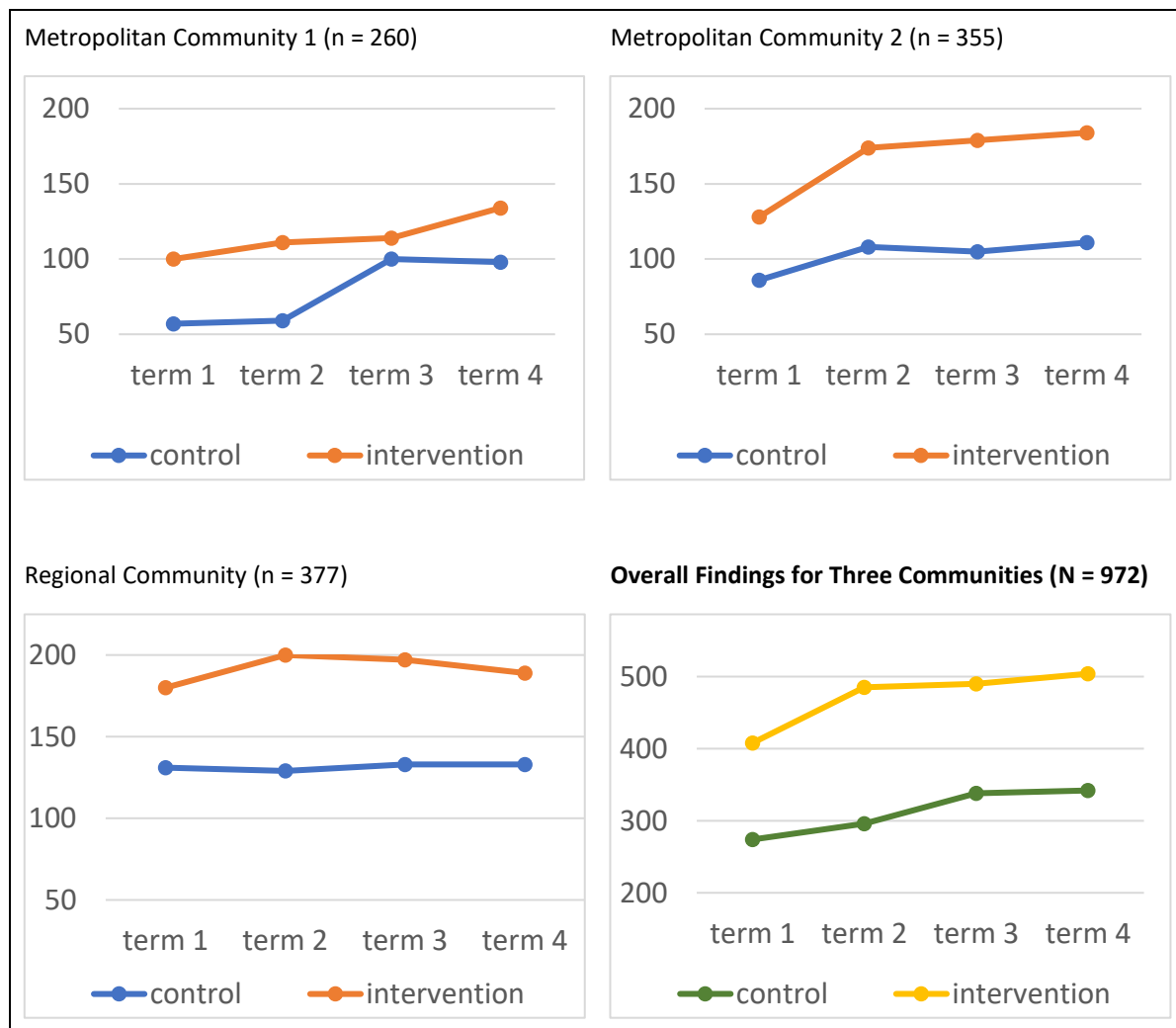
In considering these results, we were interested in the change in enrolment numbers over the course of the year, not the total number of enrolments. In particular, we examined the change from Term 2 to Terms 3 and 4 when the Intervention group commenced the PLaS intervention program.

Results depicted in Figure 1 indicate differing patterns of increases and plateaus in enrolment for Intervention and Control groups in the three communities, and the combined communities. The pattern in the Metropolitan Community 1 settings suggested a positive effect on enrolment numbers, but this was less evident in Metropolitan Community 2, and not at all evident in the Regional community. The overall pattern for the combined communities was very similar for the Intervention and Control groups, but with a slight rise in Term 4 for the Intervention group.

Using Term 2 as the baseline, and controlling for the type of ECE and community, regression analyses revealed that enrolments were 13% higher in Term 2 compared to Term 1 ($p < 0.05$).

However, there was no statistical evidence that enrolments had increased from Term 2 to Terms 3 and 4.

Figure 1. Change in Enrolment Numbers of 3- to 5-year-old Children for Terms 1, 2, 3, 4 in Control and Intervention Settings in Three Low SES Communities, and Combined Communities



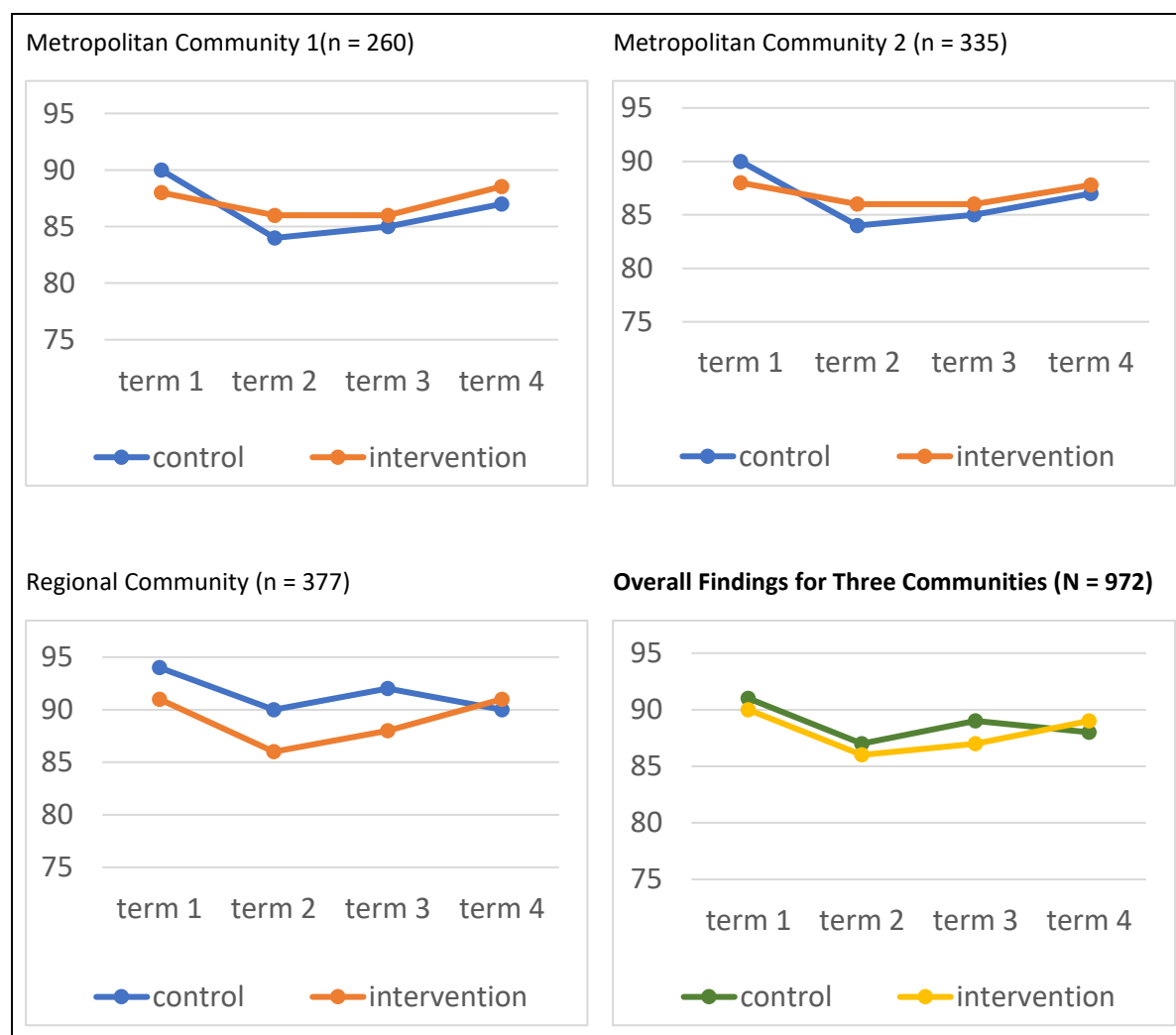
Results for Percentage of Days Attended

Unlike enrolment which may vary by ECE type, percentage of days attended is consistent across all enrolment patterns. Calculating the percentage of days attended provides a more meaningful indicator of the effect of the PLaS intervention program on attendance of children from low SES backgrounds. The full set of results for percent attendance in Terms 1, 2, 3, and 4 for the Intervention and Control groups in each community, and the combined communities are presented in Figure 2.

Overall, our results showed that rates of attendance were high, ranging from an average of 85% to 94%, but in almost all cases, attendance rates were highest in Term 1, with a marked drop in Term 2 followed by a gradual increase and levelling off in Terms 3 and 4. These patterns are depicted visually in Figure 2.

In relation to our research question, did the pattern of attendance in the Intervention group differ from the pattern in the Control group, the descriptive results suggested no effect for the two metropolitan communities. The percent attendance figures for children attending the Intervention centres/schools were very similar to the figures for the Control group for Metropolitan 1 and Metropolitan 2 settings. In contrast, results for the Regional community indicated a general upward trend in percent attendance in Term 4 for the Intervention centres compared to the Control centres. These results were confirmed in the regression analyses: the Regional community, but not the other two communities, had a statistically significant increase in attendance ($p < .05$).

Figure 2. Change in Percentage of Days Attended by 3- to 5-year-old Children in Terms 1, 2, 3, 4 for Control and Intervention Settings in Three Low SES Communities, and Combined Communities



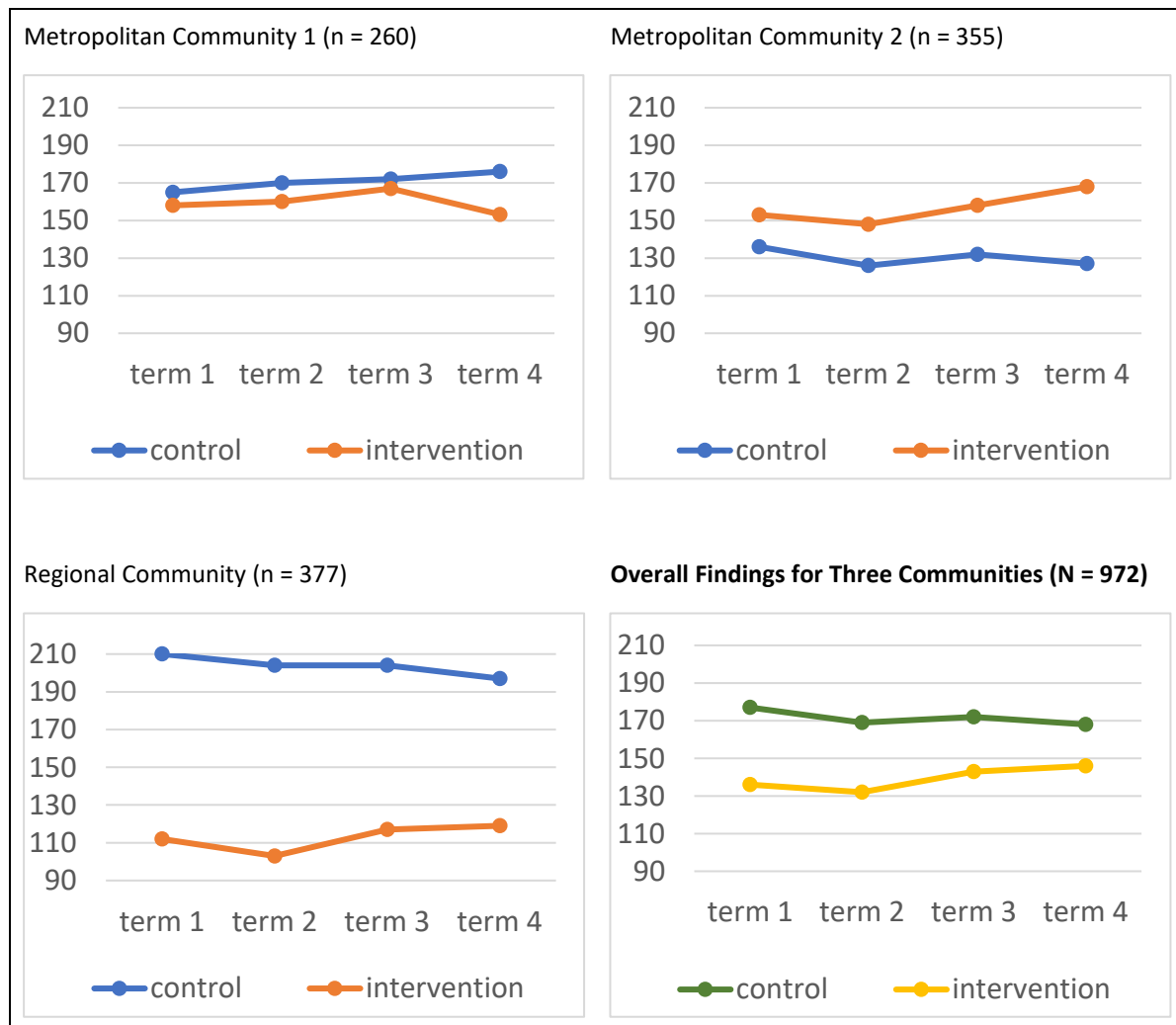
Results for Number of Hours Attended

Our second measure of ECE attendance was the total hours attended per child per Term. This was based on actual sign-in and sign-out times for each day attended, generating an accurate record of children's actual participation in ECE. For the sample of 971 children as a whole, overall attendance per term ranged from 140.4 to 155.2 hours. Across the four terms, the mean number of total hours was 510.4 (standard deviation = 362.1), and the median was 458.0 hours. Within the sample, there were wide variations, ranging from a minimum of one hour per term to 486 hours per term, and from two hours to 1,894 hours per year.

We analysed the hours attended for Terms 1, 2, 3 and 4 for the Intervention and Control groups in each community and the combined communities. This measure was also expected to be affected by ECE type, as hours in preschool centres are restricted whereas hours in long day care centres are not. Of the four preschools in the sample, one was in the Regional Community, two in the Metropolitan 2 and one in the Metropolitan community. The uneven mix of preschools and long day care centres accounts for the wide variation in total hours attended in the Intervention and Control groups across the three communities.

To address the research question, we were interested to see if the pattern of change in the total number of hours attended differed for Control and Intervention groups, particularly from Term 3 to Term 4 when the PLaS was delivered. Results were mixed. A positive effect was evident for the Metropolitan 2 community, which showed an increase in hours for the Intervention group and a decrease in hours for the Control group. However, the reverse pattern was evident for Metropolitan 1 centres/schools, with a decrease in total hours for the Intervention group and a slight increase for the Control group. The pattern for the Regional community was similar to Metropolitan 2, although with a weaker increase in Term 4. Overall, the figures for the combined communities suggested an increasing pattern of hours attended for the Intervention groups in Terms 3 and Term 4, and a stable pattern for the Control groups. The results of regression analyses showed a significant increase from Term 2 to Term 4 in the number of hours attended for the Intervention settings ($p < .05$).

Figure 3. Change in Total Hours Attended by 3- to 5-year-old Children in Terms 1, 2, 3, 4 for Control and Intervention Settings in Three Low SES Communities, and Combined Communities



Summary

Despite the challenges of collecting and preparing children’s attendance records for analysis, we were able to successfully generate meaningful indicators of ECE participation (number of children enrolled, percentage of enrolled days attended, and total hours attended) for a large sample of preschool-aged children. This is an important achievement, which generated valuable information about the attendance patterns of children from low-SES backgrounds. Our use of a quasi-experimental design enabled a comparison of these measures in a sample of similar ECE settings, allocated to an Intervention group and a Control group. While the timing of the delivery of the PLAS intervention, from Term 3 2019, and the COVID-19 pandemic (2020-21) limited our ability to fully assess its impact beyond 2019, results were promising. Regression analyses, which controlled for differences in type of ECEC (preschool; long day care) and community location, showed that the intervention had a significant, positive effect on increasing the number of hours children attended their ECE program in

two of the three communities, and increasing the percentage of enrolled days attended in one of the three communities.

Teacher/Educator Survey

Responses to the online survey were received from 11 participants.

Professional Learning Program (PLP)

In regard to the PLP, the majority of participants rated the content, tasks and activities as 'Extremely or Quite Relevant' (average ratings ranged from 4.1 to 4.6 out of 5). The highest ratings (> 4.5) were given for 'information about Trauma Informed Practice', as well as 'information on pedagogical strategies when working with children from complex family situations; e.g. building child self-regulation and guiding behaviour' and 'the well-being of educators working with children from complex families'.

In particular, respondents noted that the networking and collective discussions facilitated through the PLP sessions was beneficial for sharing experiences, expertise and strategies for working with families from low SES backgrounds. As one respondent noted:

"My previous experience before this centre was with children [in a service] ... which has a high percentage of low SES families with complex backgrounds. While I have knowledge from that experience the information provided as part of the program and also shared by the other participants extended this knowledge and gave me additional avenues from the one I already knew about to assist the families in my service."

And another commented:

"Meeting with other services bought an understanding of 'what is reality' in terms of accessing early childhood education in the wider community. This in turn made it easier to recognise barriers existing for the families and children that attended ELC. And I must say identifying the barriers was the easy part of the project. Deciding on the best strategies to implement was a world of difficult!! The content of the project was great, but it was the people and the discussions that made the biggest impact."

Most participants agreed that their knowledge of the issues that impact the attendance of low SES families had changed 'moderately' (average rating = 3.2 out of 5) due to their participation in the PLP. Several participants noted that whilst they had previous knowledge and experience of working with low SES families, the PLP was worthwhile and beneficial for learning about the challenges of attendance for these families. Further, the respondents noted that it was enlightening to learn about the challenges of supporting families in other service types.

Community Incentives Funding (CIF)

Referring to the usefulness of the PLP content, tasks and activities in assisting directors make decisions about how to use the CIF, the majority of participants rated the content, tasks and activities as ‘extremely or quite useful’ (average ratings ranged from 4.3 to 4.8 out of 5). The highest ratings (> 4.5) were given for content and activities that focused on ‘the well-being of educators’, and ‘information on pedagogical strategies when working with children from complex family situations’.

Two questions asked participants to consider the impact for their centre/school and their families of the initiatives and interventions they had introduced using the Community Incentives Funding. Ratings of the extent to which the initiatives were beneficial for children and families averaged at 4.1 out of 5 – ‘quite beneficial’. Participants rated the degree of change they had witnessed in parents’/carers’ behaviour as a result of the initiatives at an average of 2.9, ‘moderate change’; however, the responses ranged from 1 ‘no change’ to 5 ‘significant change’. In one case, a rating of 1 ‘no change’ was given because staff ‘haven’t had time to implement interventions yet’.

Overall, the initiatives introduced using the CIF were considered to be very valuable for supporting enrolment and attendance of families in ECE. For example, one respondent commented that:

“The Community Incentive Funding Package supports positive outcomes such as employing staff to provide staff to develop positive relationships with families during the enrolment process.”

Whilst the timing of the roll-out of the incentives (Term 4) made it difficult for respondents in some settings to comment on changes that the CIF had made on enrolments and attendance, even in these settings, expectations were that changes would be forthcoming in the following year. As one respondent noted:

“As we only have the children for one year, this can be difficult to comment upon. However, for next year we have had the best level of enrolments since I began at this service.”

Despite the timing of the delivery of the PLP and use of the CIF, several respondents were able to point to changes that the incentives had already made. For instance, some respondents noted that promotion activities, advertising and community engagement had increased awareness of their ECEC setting in the community. Another two respondents noted that families had expressed appreciation for the incentives. As one said: *“Families were really appreciative and excited about the interventions that we had put into place.”*

At one centre, the project had led to a complete change in their business plan in order to be more responsive to families’ needs. This respondent stated:

“This project bought about an entire business plan for this service that was drafted in consultation with my owner and approved provider. A business plan created on some identified barriers meant that a shorter session at a cheaper rate was created. This has meant that families are more consistent in their routines across the week. Arrival times are a lot more consistent and there seems to be less anxiety demonstrated. Their children arrive at the centre at 9.30am and are collected for home shortly after 3.30pm. This has been a great benefit to our families and children. They have more time to chat with educators about their child's day and assist their children to collect and pack away hats drink bottles and so on.”

The respondent went on:

“Throughout the project, strategies have been based around building partnerships, so you can only imagine the success of our parent and staff workshop that was filled with information around the importance of brain development and attachment in the early years. Since then families have expressed how they feel supported within our environment. Over time, the evening has also opened dialogue between staff and parents around the sometimes difficult behaviours and how we can best manage this. Parents that attended the workshop were also given first positions for their children to attend our family shopping evening (Dec 12, 2019), which was an evening designed to support families (particularly those who do not have alternative care arrangements/single mothers or father/families that have recently migrated) in their preparations for the holiday season. The evening was created after posting ideas to strengthen partnerships on social media following one of our research group forums. This was a wonderful way for siblings (who do not attend the service) to be welcomed within our community. Educators volunteered their time for this event and partnerships were strengthened.

Along with the business plan the service has provided new hats and shirts. The children seem to be enjoying their new sense of belonging and the families ensure that children are following our sun safe practices.”

Summary

The findings from the survey point to the benefits of the PLaS intervention for increasing enrolment and attendance by:

- increasing participants' awareness of the barriers facing families from low SES background that affect attendance in ECE programs, across different types of centres/school settings, through the PLP and facilitated discussions; and

- enabling targeted strategies/approaches so that participants could address the diverse localised barriers to family attendance at ECE programs.

In short, the survey data provides evidence that the project has met its stated objectives. The findings suggest that the two components of the intervention (PLP and CIF) should be provided in conjunction. Further, to ensure the timely roll-out of the CIF, the intervention program needs to begin early in the year.

Interviews with Centre Directors/School Principals/Educational Leaders

Thirteen Centre Directors/School Preschool Principals/Educational Leaders agreed to be interviewed. Findings from our analysis of these interviews fell into six themes: (i) participants valued the opportunity to participate in the project; (ii) participants identified and addressed diverse local issues through their participation in the project; (iii) outcomes of the project; (iv) factors that contributed to the success of the project; (v) factors that constrained participation in the project; and (vi) respondents' recommendations for the project.

Participants Valued the Opportunity to Participate in the Professional Learning and Support (PLaS) Program

All respondents commented highly favourably on the opportunity to participate in the PLaS intervention program. Twelve of the 13 interviewees noted that they appreciated the collaborative nature of the PLaS, and several (n = 3) valued the opportunity to work closely with researchers. For the following respondent, for example, even with existing knowledge there was great value in having an opportunity to focus on the issue at hand:

“I think especially when we were doing it in a collaborative way. And seeing different centres, different areas and perspectives.... I think it allowed for people who did have knowledge in that area to, in a sense, take on a mentoring type role. Their experience, but also, gave you a refresher too sometimes that you forget and you need to double back again and go ‘ok, I need to clear the mind. Right. This is what I’m focusing on’. And then like areas you aren’t so strong, you also had sometimes, that, you know, person of leadership who might have had experience with that, leading and contributing ideas”

Respondents also commented positively on the opportunities the project gave them to network with other local centres/schools (n = 5). Several respondents noted that the networking made them feel less alone in facing challenges with attendance. For example:

“I think it was really useful and having the time to spend with other centres who were going through the same issues that we were, it just makes you feel

like you're not alone, and that we were all on the same track about caring for families and the children."

The second most commonly noted (n = 9) favourable aspect of participation in the project, was the way it challenged educators' thinking, preconceived notions, and unconscious bias about why attendance was low in some settings. As one respondent put it:

"Like I said, it gave us a different perspective to look at things and not be so judgemental as to why people weren't here. We can all have our moments of judgement, even when it's not intentional, but to reframe your thinking and the reason why the attendance may not be here for some families is really important."

Almost as important to participants (n = 8) was the opportunity it afforded educators to reflect on their work with children and families from low SES groups. In particular, respondents valued the opportunity to take the time to reflect on their own setting through undertaking the situational analysis process (n = 5) and developing their proposal for intervention (n = 4). For instance, in referring to the situational analysis tool, this respondent commented how undertaking this process was useful for critically reflecting on the important, but 'hidden' issue of which children their setting was catering for, and which might be missing out:

"I think it's a great reflection tool. It's one of those things that after you've done it seems so obvious but at the same time, when you're looking at your enrolment numbers and you're looking at the fact that your children aren't attending and looking at all of these things, it's one of those things that you can easily miss. You know, going back to the start and doing the full situational analysis and kind of going from there – generally we look at it from the short-term, 'I'm time-poor and you need to do this or you need to do that'. I'm not looking at the whole picture. I think that it's a great reflection tool to take you back to the whole picture."

The facilitated critical reflection, which was a core part of the PLP, enabled educators in these ECE settings to design interventions that would address local issues.

Participants Identified and Addressed Diverse Local Issues

Across the settings, respondents identified diverse local challenges that impacted on children's attendance, and they spoke about how the project had empowered them to design a range of innovative individualised, locally relevant interventions to address these challenges.

One highly prevalent issue facing many ECE settings and their families, for example, is lack of access to allied health professionals, such as speech and language professionals and occupational therapists. The most common (n = 5) intervention across the settings,

therefore, was to engage with allied health professionals. In many cases, this engagement was aimed at improving educators' capacity to work effectively with children experiencing difficulties: For example, though 'guided practice' with allied health professionals working with educators and families within the early years setting:

"One of our aims was to have a therapist in the preschool working with the children, and doing some, what we coined the phrase 'guided practice' so implementing modelling with staff on language stimulation techniques that they could use throughout the preschool, so building the educator's skills as well, and then some family workshops with the speech therapist to support them with language stimulation techniques, what is typical language development"

Another major issue identified by interviewees is the lack of awareness in the community about the importance of ECE. Several interventions, therefore, focused on educators 'being' out in the community to increase the visibility of early learning centres/schools (n = 3), and especially to raise awareness about the importance of ECE (n = 3). For example, educators in one setting developed an easy-to-read pamphlet about the benefits of ECE, to circulate in the local community:

"Our pamphlet [talked] about how important early childhood education was for children, in language that was easy to understand for all types of people ... So from our service perspective we needed to get the knowledge more out there in this community of why early childhood is important, for the community in general for all the services, not just our own."

In several centres/schools, family financial burden had a large impact on their ability to provide the resources children required for attending early learning and successfully transitioning to school. Respondents noted that it can be embarrassing for families to admit this difficulty to educators – and this can result in families choosing not to send their children to ECE. Two respondents noted how their settings addressed this issue by using their funds to buy essential supplies for children and families. For example, one setting purchased graduation packs for the children, so that they were 'ready for school':

"We came up with an enrolment pack the kids get, because they provide their own meals here, so they get a lunch box, a drink bottle, and a backpack, and then we also came up with a graduation pack so they got all the basic things they would need for kindergarten, the pencil cases, rubbers, sharpeners, glue sticks, all those types of things."

One respondent noted how the opportunity to reflect on their setting's accessibility had led them to identify that their opening hours made it difficult for families to support their child's attendance. Consequently, they've changed their session offerings which has enabled families to take up extra days and have more consistent attendance for children:

“That has made the biggest change because we’ve found that it is the parents who aren’t potentially working that are acquiring, more acquiring of the extra days, so we’re able to give those families three days a week, rather than giving them one or two days a week so it’s more of a routine which I think in turn helps the families because it’s an everyday thing, it’s sort of like ‘oh I’m just too tired, it’s only one day’ so it makes a big difference.”

Another setting identified a need for educators to increase their knowledge about how to work effectively with children and families experiencing disadvantage, and they addressed this ‘gap’ by using their funds to design and support educators’ attendance at professional development sessions.

Outcomes of the Professional Learning and Support (PLaS) Program

Respondents noted a number of diverse outcomes that arose from participating in the PLaS. In particular, they considered that since participating in the PLaS intervention: community awareness of ECE had increased in their areas (n = 2); awareness of their settings had increased (n = 3); their settings had improved their enrolment processes (n = 4); and they had seen an increase in ‘traffic’ and enrolments from their websites (n = 3).

In regard to educator professional development, most (n = 9) respondents reported that participation in the project had increased educators’ awareness and knowledge about, and capacity to work effectively with, children and families from low SES groups. Indeed, several respondents (n = 3) noted how participation in the project had increased educators’ confidence. For instance, one respondent noted that:

“It definitely I think gave the educators an opportunity to look at things from a different perspective and they had the opportunity to be able to voice their own opinions, and participate – being able to participate in a project that is not just about a management team. So because the girls [educators] are on the ground working with what goes on on a daily basis and they were able to put their ideas forward. I definitely think that that gave them a little bit more empowerment.”

One respondent particularly reflected on the leadership opportunities afforded by the engaging in the project.

Most importantly, respondents reported that child enrolment had increased in their settings. In particular, since participating in the project, settings had increased their enrolment of children with additional needs (n = 5), Aboriginal and Torres Strait Islander children (n = 1), and refugee children (n = 1). One participant, for example, talked about how the support of the project enabled them to enrol more children with additional needs, when other settings weren’t able to provide for them:

“Before, children were leaving and having their OT [occupational therapy] visits, we swapped that around and the OTs now come into our service, and that includes – so we have a little boy that has cochlear implants in the preschool program room. His mum was really concerned that he wouldn’t be able to undertake a preschool program, with us, because of the cochlear and all that, and she’d gone to other services, and they’d gone ‘oh it sounds a bit too hard’, and we went, ‘we wanna have a crack’. And it’s been so successful. So we probably have one, two, three – have about six children with additional needs that require OTs coming in weekly and we just love it.”

Further, one respondent noted that since participating in the project, children’s hours of attendance had increased, and that parents were on time more regularly:

“Some families we’ve been able to convince to come earlier in the day, things like that, so just using the information from the sessions that we had and the process of reflection that we had and are having those conversations. Even though we were having them before, but we’re probably being more intense with the conversations. We have had some families who would rock up at 10.30 now coming at 8.30 or 9 o’clock.”

Another respondent made special mention that they valued the opportunity to contribute to community building (n = 1).

Factors that Contributed to the Success of the Professional Learning and Support (PLaS) Program

The biggest factor that (n = 10) respondents considered contributed to the success of the PLaS was the facilitators – and specifically the facilitators’ knowledge of early childhood and the scaffolding and support that facilitators built into the program (n = 7). One respondent summarised the contributions of the facilitators as:

“I just think that the facilitators were awesome, very approachable, very knowledgeable about early childhood, and understood where we came from and our challenges. Sometimes you participate in things that don’t get the gist of what we do or why we do or the challenges that we have, but they were very good. They gave us strategies as well. Very helpful.”

Other factors that respondents considered contributed to the success of the program was the high applicability of the content of the PLP (n = 5) and the fact that they were supported to develop bespoke and nuanced solutions (n = 8) which enabled educators in centres/schools to be responsive to the needs of specific families from low socio-economic groups. The meal provided during the PLP workshops was also especially appreciated by one respondent!

Factors that Constrained Participation

There were, however, some constraints on educators' participation noted by the respondents. The biggest (n = 9) of these restraints being the impact of COVID, which had not only restricted educators' participation, but also heightened difficulties in accessing the resources needed to implement their proposed intervention. Many centres/schools struggled to enact their proposals because of the low attendance during COVID:

“COVID really did have a big impact on the follow-up and because we all had to sit back and not be able to do those things and it was hard trying to get parents and families to interact as it was.”

Accessing resources wasn't just a challenge because of COVID though, several settings (n = 3) struggled to find contacts and people to enact their goals because of a lack of services in their area. One example, below, illustrates how educators struggled to find an occupational therapist with capacity for the children, eventually resorting to working with one out of area in Mudgee:

“What we discovered that was really useful, by developing this proposal, and engaging with an allied health professional, was that there was a real lack of people available in the community – the health professionals – we found it was very hard to engage with the professional service – allied health service, who didn't give us a quote, or even get back to us. Like, they were just unavailable. We were initially seeking some sort of OT or behavioural therapist, and there was a lot unavailable within our region. They were booked up or they were unavailable or they weren't doing as much, or their caseload was just so chockers that they just didn't have time.”

Other factors impacting on the success of the program, from the respondents' perspective, were related to workforce issues. Respondents commented favourably on educators' willingness to engage in the program - much of it in their own time. Nevertheless, the necessity of doing the work in their own time, above and beyond paid hours (n = 6), insufficient time to engage (n = 4), and the impact of staff turnover (n = 5), had a negative impact on the success of the program. One respondent, for example, reflected on their own experience through the project, and how their changing full time work demands impacted on their ability to participate fully:

“I think it was having the availability of staff to continually attend those meetings, they were after-hours, so you've got to really ask people to donate their own time I guess. For me personally, taking on another service as well, I loved it but it became another – I would have loved if we had the momentum going because I would have stayed engaged – I disengaged because my workload became so great that I personally didn't tap in as much as I should have. So I've gotta put my hand up to that one as well.”

Recommendations for the Professional Learning and Support (PLaS) Program

Funding for initiatives (i.e., CIF) is a critical component of the PLaS. There were comments on funding from all 13 participants, reflecting differences in opinion about the funding amount. Nine participants considered the amount per community was sufficient, whereas three considered the amount insufficient. Three respondents were grateful for any amount of funding, and one noted the importance of working within allocated funds. For example:

“Oh yes, I was over the moon with the funds! Definitely. Especially for a private centre, there’s not a lot of extra spending money. And everything I do get is planned way way in advance.”

“If we had maybe \$2000 more I think that would have been ideal, but, - everyone might like a little bit more money, we always want something, so we just made do with what we had and yeah, we somehow made it work!”

“Yeah I do. I do think it’s adequate. I know that buckets of money are very limited. Fifteen thousand is a very reasonable amount whether it’s done as a collective group, or whether it’s broken down. So if we broke it down that’s what? Basically 3,000 – a little bit over \$3,000 each. That still gives plenty of money – I mean you can never get enough money – still plenty of money to actually, actively invest, or introduce a project. Even if you have to do a bit of funding yourself, it gives you money to start something that you may not have started in the first place.”

The differences between respondents are likely due to individual settings receiving differing amounts depending on the number of centres/schools in the participating communities (for example in some communities there were only two centres/schools to share the funds, whereas in others there were three or four).

Two respondents noted the importance of funds being ongoing, so that they could address the needs of subsequent families:

“I think – yeah, if they were to – if the government was to roll this out and really do this, I think maybe \$15,000 shared between us, maybe every year would be better. On a yearly basis. I don’t think a one-off payment of \$15,000 between four centres would do it.”

There were also recommendations about the PLP, related to content and structure. In regard to content, several (n = 7) respondents thought that families should be involved in the PLP, while the others were more cautious about families’ inclusion. Only one respondent thought that families should not be included directly. Their reason was that discussions about families’ challenges could be seen as confronting for them. The consensus was that it is worth including parents and families, but in a limited capacity.

“I think it’s always important to have that, because sometimes we can go in with really good intentions, but we don’t realise we’ve trodden on toes and maybe insulted them. Not on purpose. But I think those people you do involve, you have to have a very good relationship with them. Cause I think sometimes we assume that they need this, and they don’t.”

Conversely:

“I think some of the things would probably be quite confronting, and yeah, could scare some families off. I can see some of our family’s sort of – I suppose hearing some of that information and getting a bit disheartened, or frustrated. But I think to an extent, I think they’d definitely benefit in trying to, you know, to promote preschool participation in any way we can.”

Overall, the content of the PLP was seen to be appropriate and well designed, although some respondents (n = 2) added that extra content on improving transitions to school for low SES communities would be helpful. One respondent asked for an expanded section on the importance of ECE, and one asked for more content on creating community relationships.

Additionally, the importance of including children’s voices in projects such as this was underscored by one participant:

“I think that being the fact that collaboration, I think parents should have a voice, and even the children. Asking the children how they want to be included. What they think, so that’s where I think that possibly it could be improved upon. Parents and children’s voices... We’ve got to meet all needs. I guess it comes around so I think the approach from the child’s perspective because that’s what it’s about – it is about them. You know, why do you want to come to day-care? What do you like about day-care? What’s fun about day-care? A lot of those I guess could be built into it.”

In regard to the structure of the PLP, most respondents’ comments (n = 6) reflected satisfaction with the existing program and suggested that no changes be made.

“Nothing I don’t think, other than having more of it! I really, really loved it. I really did and it was worthwhile, I’ve shared it with others. I’m really, really glad we did it. It was wonderful.”

Where recommendations for changes were made, these were mostly (n = 5) recommendations to increase the number of meetings outside of the PLP sessions, and/or to allocate more time in the PLP sessions to discuss and reflect on the topics, and/or to make them available to more educators. These recommendations reflect the enthusiasm of participants for the program and the benefits it had for them:

“Sometimes it wasn’t long enough! We only had two centres but there were lots of discussions. I mean, we would always ask for more time. We always want more sessions to learn.”

Similarly:

“We had more people who actually wanted to do it than did it, so even though it might have only been the three of us, if given the opportunity I think more people would engage in things like this, from our service because that’s just where our mind-set is.”

Other respondent recommendations (n = 3) were to provide more opportunities within the PLP for educators to network with other educators in other settings, or with other kinds of services (e.g., allied health) which would be of benefit to the settings:

“And maybe, ... supports for some of the more very privately run and owned centres in the sense of networking where they can go to, because ... they might need a bit more support trying to find people to help implement their plan. Cause I’m very lucky being part of the department – I’ve got a bigger body to draw upon. And network with. ... I think – yeah, connections to something like that within each centre’s location would be really helpful for them.”

In contrast to the six respondents who recommended no changes, some respondents recommended minor changes to the PLP. For example, three respondents suggested that the content of the PLP be more targeted to educators of different qualification levels. Two respondents requested that the PLP be broken down into smaller ‘bite sized’ pieces to allow for more in-depth understanding.

In regard to structure, three respondents thought that the PLP sessions would be improved by bringing together similar settings in order to encourage deeper more specific discussions between peers:

“I think probably what I said before, it would have been nice to work with a centre that was similar to my own. I feel like we could have – the conversations could have been deeper – I had to sit and do a lot of listening during the group meetings because the ladies I was working with also were teachers, with different approaches to teaching, whereas I’m experienced as well but with a Diploma and last year of degree, it was just, I felt, I don’t know, it was a feeling of inadequacy or it was, people speaking over you, it’s hard to explain.”

One respondent went further and requested a greater opportunity to focus on the needs of individual settings.

“What we did was just two centres, but if we could focus that on just our centre, I mean that would be ideal too!”

Overwhelmingly, respondents were highly appreciative of the opportunity to participate in the PLaS program. Typical of comments was this one where the respondent summarised the benefits that the program had for them:

“I just want to say thank you for having the opportunity to be able to participate in something like this. I think I would like to do something like this every year to make sure things are – I don’t know, you just look at things from a place where you wouldn’t have looked at it. A new perspective, I’m trying to come up with a different word but there’s nothing else! It really gave me a new perspective and a different way to work, and I really, really liked that.”

Summary

The findings from the end of project interviews with Centre Directors/School Preschool Principal/Educational Leaders demonstrate the participants’ strong view that engaging in this facilitated and targeted program was professionally and personally rewarding. The PLaS allowed them to:

- reflect critically on their setting and their practices;
- identify and address diverse local issues;
- create strategies for their community which had positive outcomes on children’s enrolment and attendance in ECE; and
- deliver support which was community wide as well as nuanced and targeted for individual families and their situations.

The interview data shows that participating in the PLaS was beneficial to the participants and their communities beyond what the CIF provided, although the CIF was an essential component. Participants also encouraged continuation of the program and saw the benefits of expanding the program further in their community to include families and children.

LIMITATIONS

Unforeseen delays to the commencement of the project in 2019 and the delivery of the PLaS program to the Intervention group of centres/schools resulted in a later use of the CIF than was originally expected. While centres/schools planned and costed the initiatives and interventions that were to be funded, in a number of cases expenditure occurred late in 2019 or was delayed to 2020. This meant that the outcomes of the PLaS had not yet been realised during Term 4, and therefore, were less likely to have made an impact on children’s

attendance patterns. Similarly, in the 2019 Teacher/Educator survey, a number of participants commented that it was too early to see the effects of the centre's/school's initiatives.

The delayed commencement of the project also affected the overall findings of the 2019 Teacher/Educator survey. Of the 27 Centre Directors, School Preschool Principals/Assistant Principals/Educational Leaders, teachers, and educators who participated in the PLaS intervention program in 2019, only 13 submitted responses. This was likely due to its distribution in December, a very busy time for ECE centres/schools.

To address these concerns, at the end of 2019 we arranged to: (1) commence delivery of the PLaS program with the Control group of centres/schools in early 2020; and (2) to extend the collection of children's attendance records from Intervention and Control settings into 2020. Our aim was to provide the opportunity for longer-term examination of impact on ECE participation, and evidence of the ongoing and lasting effects of the PLaS. With the arrival of the COVID-19 pandemic in March 2020, these plans were no longer feasible. Our delivery of the PLaS to the Control centres/schools, including the collection of attendance data, had to be paused in 2020. We were able to recommence the program in 2021, and deliver the PLaS to the Control group, but the changes to the NSW Department of Health advice about ECE attendance, specifically the recommendation that parents not use ECE unless absolutely necessary, invalidated any benefit of using attendance data to evaluate the effectiveness of the intervention in 2021.

The recruitment and participation of Centre Directors /School Preschool Principals /Educational Leaders in the end of project interviews in 2021-2022 was affected by the continuing burden of COVID-19 on ECE centres and schools. Of the 19 centres/schools that participated in the SPIECE project, 13 Centre Directors /School Preschool Principals /Educational Leaders agreed to be interviewed. Interviews were scheduled at times that were convenient, across the 2021 end of the year and 2022 commencement of the year period. Some, while keen to be interviewed, were unable to fit this into their very busy and demanding schedules.

OVERALL CONCLUSIONS

The purpose of this research was to support the participation of preschool-aged children from low socio-economic status (SES) family backgrounds in early childhood education (ECE) programs through gathering evidence on the impact of non-fee interventions. Our aim was to design and deliver an innovative and comprehensive community-based intervention for Centre Directors, School Preschool Principals, Educational Leaders, teachers, and educators that would enable them to support parents, especially those from low SES backgrounds, to enrol and maintain their children's participation in ECE. The results presented in this report provide clear evidence that the design and approach used to provide the Professional

Learning and Support (PLaS) intervention program, and the methodology applied to evaluate the intervention, have been effective.

At the commencement of the research, we set four criteria by which to judge the effectiveness of the PLaS: (i) responsiveness to the needs of families and their children; (ii) effective in promoting and improving attendance of low SES children; (iii) attractive to and supportive of early childhood educators; and (iv) financially cost-effective and sustainable. In the following sections we summarise the evidence for each of these criteria, drawing on the PLaS template summaries provided by all participating centres/schools, and our analysis of three sources of data: 2019 attendance records for Intervention and Control groups, 2019 Teacher/Educator survey for Intervention groups; 2021-22 interviews with Centre Directors/School Preschool Principals/Educational Leaders.

The Intervention was Responsive to the Needs of Families and Their Children

A key feature of the PLaS intervention was the situational analysis task that focused participants' attention on the barriers and strengths of the community, families and children in their centre/school that inhibited or supported children's enrolment/attendance. This was the first step in developing context-specific interventions to address barriers and support attendance. Participants were asked to consider how the intervention would assist families and what difference it would make to children's enrolment or attendance. By thoroughly considering the need, purpose, goals and anticipated outcomes of each intervention, participants ensured that their proposals for using the Community Incentives Funding (CIF) were focused and relevant. The initiatives that were supported by the CIF facilitated ECE participation through: developing trust and a sense of belonging between families and the centre/school; addressing families' concerns about non-fee costs associated with enrolment or attendance; supporting families experiencing challenges related to having children with disabilities and/or impacted by trauma; and increasing families' understanding of the value of ECE.

Participants shared stories in the interviews on how they were being more responsive to families. For example, one very experienced participant noted: *"trying to look at things outside the box"*. Another centre organised a community workshop to focus on children's brain development and learning in the early years which was for both educators and families. They had 60 families attend (which was a huge turn-out for them) and the feedback was very positive, with families saying for example: *"wow, I have never looked at it that way."*

The Intervention was Effective in Promoting and Improving Attendance of Low SES Children

The collection in 2019 of individual attendance records for 971 children attending ECE programs in 19 centres/schools (9 in the Intervention group and in the 10 Control group) generated three measures of ECE participation for each centre/school: enrolment numbers, percentage of days attended, and total hours attended. No other study has assessed the

effectiveness of a professional learning intervention in this way. Neither is there any existing Australian research that has tracked children's attendance in such detail and with such accuracy, for preschools and long day care centres, across the year before school. Despite the mid-year commencement of the PLaS program and the delayed implementation of CIF initiatives in the 2019 Intervention centres/schools, findings indicated there were clear differences between Intervention and Control groups emerging in Term 3 and Term 4. Children enrolled in centres/schools that received the PLaS Intervention increased their hours of attendance and, in one community, increased the percentage of days attended.

Further evidence was provided in the 2021-22 interviews with Centre Directors/School Principals/Educational Leaders. They described several examples of increasing attendance of low SES children. For example, a very experienced educator noted all staff at her centre had made a considered effort to be inclusive and have warm conversations with families from low SES backgrounds and noted that *"the child had a really low attendance rate, and after the conversations, and we felt that more inclusiveness, the attendance rate of the child actually increased."* Another centre respondent highlighted that she was more confident when doing tours with new families and was more cognizant of low SES families. For example, noting:

I had one family in particular – she was working with two outside organisations...Anyway, none of them had been able to help mum to enrol her child. They sort of got to the point where she's applying for childcare subsidy and approved and then she would sort of back out a bit, and change her mind and didn't want to enrol, and anyway, I ended up, I sat with her and I knew that that was an issue and I thought 'I know what this is!' Yeah, because I've done the training, but anyway I sat there – we sat in the office and I got to know her and had a bit of a chat and we went through the CCS application process, and we did the enrolment forms with her, all in the one sitting which went really well and then her child is still attending".

The Intervention was Attractive to and Supportive of Early Childhood Educators

Participants found the collegiality of the PLaS enhanced their sense of community with other early childhood educators working in the same LGA. Visiting each other's settings also enabled them to view the way other educators displayed and shared information with families which in turn promoted conversations at mealtimes. This also led to how the issues that were discussed around visibility of ECE in the community could be strengthened, with the broader goal of sharing information on the importance of early childhood education with the community. This was an unexpected outcome and one that the group strongly believed in, regardless of whether the setting was community or privately operated. An overwhelming sense of learning about Trauma Informed Practice was also noted as extremely beneficial when working with the families. This also led to educators discussing ongoing Professional Development with the entire staff so that everyone would have such important shared understandings of families lived experiences and ways to support them.

Findings reported in the 2021-22 interviews noted the PLaS was also reinforcing participants' knowledge and understanding of working with low SES families. Many educators also felt empowered that they were included in the intervention – i.e., that it wasn't only the senior staff or management team. Completing the situational analysis for their centre/school was seen as key to building a team approach to the interventions, with one respondent noting: *"I think it gave the educators an opportunity to look at things from a different perspective and they had the opportunity to be able to voice their own opinions and participate"*.

The Intervention was Financially Cost-Effective and Sustainable

A key innovation of the PLaS intervention was the inclusion of Community Incentives Funding (CIF) of \$15,000 per community which was available to resource context-specific initiatives via proposals by each centre/school or a collective of centres/schools. Each proposal was accurately costed. Approved funding enabled the initiatives to be realised and evaluated in relation to the benefits experienced by the centre/school, families and children. Feedback from the 2019 Teacher/Educator survey and 2021-22 end of project interviews with Directors/Preschool Principals/Educational Leaders showed that the funds were well used and made a difference to some of their practices in relation to working with low SES families.

In relation to the sustainability of this model for a non-fee intervention, the end of project interviews raised concerns about teachers/educators doing the work for the PLaS program in their own time, above and beyond paid hours, which restricted the amount of time they were able to commit. Issues related to staff turnover were also mentioned as having a negative impact on the success of the program. However, this was likely to have been higher than usual from 2020 onward, with the staffing challenges that affected the ECE sector, during the COVID-19 pandemic.

Summary

Overall, the findings from the evaluation of the SPIECE research project demonstrate that the PLaS intervention was professionally rewarding for all the ECE practitioners (teachers, educators, and centre/school leaders) who engaged in this facilitated and targeted program. Participation in the program was a useful process that supported their reflection on their practices. The integration of the three design components of the PLaS program comprising the delivery of professional learning modules, together with mentoring support visits, and availability of community incentives funding, was integral to the successful implementation of this project. The targeted and continuous provision of mentoring and resourcing throughout the project also ensured the facilitation of inclusive, locally relevant strategies and initiatives in each community. Consequently, the strength of the partnerships that emerged between the ECE practitioners and the research team contributed towards achieving positive outcomes for families' engagement with, and children's enrolment and attendance in ECE in the participating centres/schools.

RECOMMENDATIONS

Based on our experiences of implementing and evaluating the PLaS intervention program from 2019 to 2022, we offer the following recommendations to benefit the work of ECE teachers, educators and leaders and the participation in ECE of families and children in low-SES communities. We also suggest avenues for future research related to participation in ECE of children in low-SES communities.

1. Scale up and Extend the Professional Learning and Support (PLaS) Non-Fee Intervention Program

This research has generated strong qualitative evidence demonstrating the value of the PLaS model, specifically, professional development that is designed by well qualified, skilled and experienced experts who deliver the professional development on-site at a location readily accessible to the participating centres/schools, removing the extra burden of travelling too far and reducing time pressures. Future extensions of the PLaS program could explore options for a blended model, combining on-site with on-line delivery, and other ways to facilitate a broader roll-out, for example, by including all staff at each setting and the full range of qualifications and experiences of staff teams. This would provide the opportunity to adjust the content and approaches as needed, according to the specific circumstances of participating centres/schools.

2. Re-evaluate the Effectiveness of the PLaS Intervention on Improving ECE Attendance

A key innovation of the *ECE Participation of Children from Low SES Backgrounds* research project was the collection and analysis in 2019 of daily attendance records for all 3- to 5-year old children who were enrolled in the 9 Intervention and 10 Control centres/schools. No other Australian study has tracked children's attendance in such detail and with such accuracy, across the year before school. Unfortunately, the COVID-19 pandemic prevented the planned collection of similar records in 2020 and 2021. We recommend the DET support a replication of the research design with a new cohort of communities and centres/schools to fully evaluate the effectiveness of the PLaS intervention on improving ECE attendance in areas identified by the 2021 AEDC (www.aedc.gov.au/data) as having higher-than-average rates of children with developmental vulnerability at the start of school.

3. Promote Networking Opportunities Through Locally Based Professional Learning

The delivery of the PLaS intervention within local communities enabled participants to discuss issues and share resources with colleagues in neighbouring centres/schools. The PLaS model was designed to promote and build trusting relationships within the community through engaging with colleagues who had shared interests and collaborating on community-wide initiatives. We recommend that this type of networking model be

promoted and applied on a continuous basis to further support families' and children's participation in ECE.

4. Combine Professional Learning with Access to Funding for Context-Specific Initiatives

This research has demonstrated the benefits and positive impact of linking professional development in ECE settings with initiatives for practical outcomes through the provision of financial support. The allocation of resources directly to centres/schools empowered them to make local decisions and take actions to address local concerns and barriers to ECE participation. The funding allocation enabled centres/schools to address needs that specifically apply to their children and families, or potentially, to collaborate to share costs of providing specialist support for children such as occupational health or speech therapy on-site. This feature of the PLaS intervention provided tangible benefits to children and families.

5. Develop Appropriate Strategies for Including Children's Voices in Future Research on ECE Participation and Professional Learning

Participants in the *ECE Participation of Children from Low SES Backgrounds* research project strongly endorsed the United Nations Convention on the Rights of the Child principle of engaging with children on matters that concern them and their lives. This includes their views and experiences of participation in ECE. We recommend that future professional development programs consider the ways that leaders, teachers, educators and families can gather and value children's input, and use this to inform the design and delivery of ECE programs that are attractive and responsive to children in low-SES communities.

6. Research the Challenges of ECE Support for School Transition in Low-SES Communities

An important component of the PLaS program and findings from the research project related to the specific challenges ECE centres were dealing with to provide support for children making the transition to school. Two concerns were raised that we recommend be considered for future research:

- (i) promoting a deeper and more collaborative understanding of the value of Transition to School statements prepared by ECE educators for families and teachers in schools in low SES communities;
- (ii) addressing the additional administrative demands on ECE educators to provide support for children with disability or developmental delay to make a successful transition to school. We recommend that the DET consider making funding available to research existing and potential opportunities for collaboration across the ECE and school sectors, and identification of shared goals to facilitate school transition for children and families in low-SES communities.

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